
TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING
VOLUME II HEALTH CARE FACILITIES PLANNING
PART 13 - SITE SELECTION AND EVALUATION PROCESS

CHAPTER 13-4 SITE SELECTION AND EVALUATION PROCESS

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13-4.1 INTRODUCTION

This chapter of the Technical Handbook describes the Indian Health Service (IHS) health facility site selection and evaluation process and delineates the responsibilities of each party involved. The site selection process is a cooperative effort involving the Area, the Engineering Services (ES), and all affected tribes. Generally, the process consists of two phases in which proposed sites for each new, replacement, or expansion health facility construction project are reviewed with the purpose of selecting one that is mutually acceptable to IHS and all affected tribes.

The IHS maintains various priority lists of facilities needs. Each project on these lists that involves new construction or replacement and/or expansion of existing facilities or quarters units requires a Program Justification Document (PJD), a Program of Requirements (POR), a project cost estimate, and a Phase II Site Selection Evaluation Report (SSER). In addition, a Phase I SSER is required for all new and replacement facilities. Because ES uses the Phase II SSER when preparing facility budget cost estimates and because design may not begin until a site has been selected, it is essential to complete the site selection process and the Phase II SSER as early in the planning process as possible.

13-4.2 SITE SELECTION PROCESS

GENERAL - The site selection process is initiated when IHS Headquarters indicates that the draft PJD complies with IHS facilities planning guidelines and is ready to be completed for approval. If the proposed project includes new construction or replacement of an existing facility, the Area Office and ES will complete the Phase I site selection survey. During Phase I a team consisting of Area Office, Service Unit, tribal, and ES personnel evaluates various sites for the proposed project. The Phase II, or the final site analysis process, begins as soon as possible after the Phase I Site Selection and Evaluation Report (SSER) has been approved and funding to complete Phase II is available. If no Phase I SSER is required, Phase II is begun as soon as funding is available. The Phase II effort includes a detailed technical analysis and, if necessary, an update of any information appearing in a Phase I SSER.

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The Area Office is responsible for initiating all phases of the site selection evaluation process by asking ES to set up a survey team, complete the survey and prepare a SSER. The ES is responsible for coordinating the actual survey with the Area Office and for preparing the each required SSER. Each SSER is reviewed by the Area Director who forwards it to Headquarters with the recommendation that it be approved. The approving official is the Director of the environmental health and engineering program in Headquarters. After each SSER is approved the Division of Facilities Planning and Construction, OEHE, will furnish copies to ES and the respective IHS Area Office.

PHASE I - The Phase I Site Selection and Evaluation process surveys each potential site in terms of area requirements, accessibility, adequacy of support services, potential flood problems, etc. The sites are evaluated, rated, and ranked based on predetermined criteria, and ES prepares a SSER documenting the findings and conclusions obtained during the survey. The report indicates a specific site as the first choice for the proposed facility. The Phase I SSER is used as supporting documentation for the final PJD and ensures that suitable sites are available for the proposed facility. A Phase I SSER is not necessary if the proposed project is limited to modernization/expansion of an existing facility because it is assumed the existing site will be used.

Before the Phase I survey begins at least three sites must be identified that have adequate surface area and other desirable characteristics for placement of the planned facility. All affected tribes must be consulted regarding the general location of the proposed facility and should be involved in selecting specific sites for review. Any site selected must have the concurrence of all tribes. Sites located adjacent to existing facilities that are being replaced should be considered and evaluated during Phase I. If a potential site is on Trust land, it must be set aside in writing by the tribal officials and its availability for construction of a health facility verified by the Bureau of Indian Affairs (BIA).

The Area Office, upon notification by the Headquarters facilities planning and construction program, that the draft PJD may be finalized for approval, asks ES to establish a site study team, schedule site visits and prepare the appropriate SSER. If a Phase I SSER is required the ES, with assistance from the Area Office, selects members for the site study team and schedules the Phase I survey. The site study team should consist of at least three members: an ES representative; an Area representative; and one tribal representative from each tribe. Representatives of other entities may be included if deemed necessary. These representatives could be from the Service Unit, the Bureau of Indian Affairs (BIA), etc. When the survey is complete ES compiles the data and the findings of the various team members and prepares the Phase I SSER. Appendix A contains a prototype Phase I SSER.

Although it is primarily the ES's responsibility to coordinate the site selection survey and complete the SSERs and submit them to the IHS Area Office for approval, both IHS and ES must work together in completing the reports.

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PHASE II A Phase II SSER is necessary for all facilities and is completed concurrently with the POR. If a Phase I SSER has been completed or is not required, the Area Office, asks the ES to complete a Phase II SSER. The ES may organize the Phase II site selection survey as soon as funds are available. Performing the site selection survey and completing the SSER is a cooperative effort involving the IHS Area Office, the ES and all affected tribes.

Before the Phase II survey is initiated, the IHS Area Office must obtain documentation from the BIA indicating that all sites on trust land that were selected during Phase I are available for the proposed facility and that any of these sites finally selected will be withdrawn from the tribal inventory.

Because a significant amount of time may have elapsed between completion of the Phase I SSER and commencement of Phase II, it is very important that the Phase I report be reviewed to ensure that the parameters which resulted in the original ranking of the sites have not changed. If these parameters have changed significantly, the Phase I SSER should be reviewed by the selection team to determine if a new ranking would result from these changes. If a new ranking would result, a revised Phase I SSER must be prepared prior to commencing detailed evaluation of a specific site under Phase II. This revised Phase I SSER can be included in the Phase II SSER for the selected site. Appendix B contains a prototype Phase II SSER.

13-4.3 RESPONSIBILITY

As each phase of the site selection process is completed, the reports will be reviewed and recommended for approval by the ES Director and the respective Area Director, then forwarded to the Director of the environmental health and engineering program at Headquarters, for approval.

The ES has prime responsibility for completion of both the Phase I and Phase II reports. The ES and the IHS Area Office share the responsibility for obtaining and verifying the data required to complete these reports.

The ES and/or the Area Office as appropriate, are responsible for contacting the clearinghouses, committees, state and local officials, and other Federal agencies while preparing the elements of the Phase II SSER for which they have prime responsibility. A list of applicable Executive Orders, Public Laws and Regulations follows:

- a. Executive Order 12072 (Federal Space Management)
- b. Executive Order 11988 (Flood Hazard)
- c. Executive Order 12003 (Energy Conservation)
- d. Executive Order 11593 (Archaeological)
- e. Public Law 59-209 (Antiquities Act)
- f. Public Law 74-292 (Historic Sites)
- g. Public Law 85-627 (Archaeological Salvage)
- h. Public Law 86-523 (Reservoir Salvage)
- I. Public Law 88-665 (Historic Preservation Act)
- j. Public Law 93-112 (Rehabilitation Act)

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- k. Public Law 91-190 (National Environmental Policy Act)
- l. Public Law 91-646 (Relocation Assistance)
- m. Public Law 93-291 (Archaeological)
- n. Public Law 91-524 (Agricultural Act)
- o. Public Law 90-480 (Architectural Barriers Act)
- p. Public Law 94-163 (Energy) (EPCA)
- q. Public Law 95-619 (Energy) (NECPA)
- r. Public Law 100-418 (Usage of Metric System)
- s. OMB Circular A-2 (Utilization, Retention and Acquisition of Federal Property)
- t. OMB Circular A-95 (Conformity with State or Regional Plans)
- u. NFPA 101 Life Safety Code (Latest Edition)
- v. Other Regulations, Ordinances, etc., pertaining to specific local and tribal governments

The IHS Headquarters, DFPC, must indicate that the draft PJD complies with IHS planning guidelines and policies and that it is ready to be prepared in final for approval before the site selection and evaluation process can begin. Funds for the Phase II SSER will be provided by IHS Headquarters, DFPC, to ES upon request after funds for the project have been appropriated by the Congress.

To fully understand the responsibilities established, the following definitions are necessary.

Area: Area Director or designee

IHS HQ: Director, health care facilities planning and construction program or designee

ES: Director, ES Region or designee

Prime: The office(s) having "prime" responsibility for a listed task/activity shall be responsible for all planning, direction, execution, and follow-up of that task/activity. Where more than one office is indicated, there is joint responsibility and the offices concerned shall agree on an equitable division of work and a time schedule for completion of the task. Office(s) having a "prime" responsibility shall contact the office(s) which have "support" responsibilities to determine the extent to which their joint efforts shall be coordinated.

Phase I This is the initial phase of the site analysis process. The IHS Area Office, in concert with the Service Unit, tribe, and ES, evaluates various sites for each proposed health facility project in the Area and select one for further consideration during Phase II in which a site is reviewed in detail, to ensure its adequacy and to identify potential problems that need addressing during design and construction.

Phase II This is the final phase of the site analysis process in which a site is reviewed in detail to ensure its

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adequacy and to identify potential problems that may need addressing during design and construction.

Support: The office(s) with "support" responsibilities shall provide timely assistance and consultation to the office(s) having "prime" responsibilities in accordance with a predetermined plan for coordination of joint efforts.

Tribe: Tribal governing bodies or designated tribal organizations.

The table on the following pages describes task activities related to the site selection process for proposed IHS facilities and the office or group having prime and support functions.

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<u>TASK ACTIVITY</u>	<u>RESPONSIBILITY</u>	
	<u>PRIME</u>	<u>SUPPORT</u>
PHASE I		
1. Provide to the Area the names of those projects being considered during the Phase III, Health Facilities Construction Priority System, indicating locations that require SSERs.	IHS-HQ	
2. Determine the general location for proposed facility and designate at least three (3) specific potential sites for consideration.	Tribe	Area
3. Submit a tribal resolution to the Area identifying the potential sites and indicating the tribe's support for using them for the proposed facility.	Tribe	
4. Indicate to the Area Office that the PJD complies with IHS planning criteria and is ready to be prepared in final for approval.	IHS HQ	Area, Tribe
5. Ask ES to set up a site study team, schedule a site selection review, and prepare a Phase I SSER. Provide a PJD to ES.	Area	ES
6. Establish team to evaluate sites, establish schedule for the review and preparation of the SSER.	ES	Area, Tribe
7. Obtain and verify data required to complete the Phase I SSER.	ES	Area, Tribe
8. Complete Phase I SSER.	ES	Area, Tribe
9. Recommend approval of the Phase I SSER and forward to Area.	ES	Area, Tribe
10. Review the Phase I SSER and forward it to Director of the environmental health and engineering (EHE) program with the recommendation that it be approved.	Area	
11. Review and approve Phase I SSER.	Director, EHE, IHS HQ	IHS-HQ

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<u>TASK ACTIVITY</u>	<u>RESPONSIBILITY</u>	
	<u>PRIME</u>	<u>SUPPORT</u>
12. Furnish copies of the approved Phase I Report to ES and Area Office.	IHS HQ	
13. Maintain and keep current the results of the SSER.	ES	Tribe, Area
14. Ensure that Phase I SSERs have been completed for projects on the Phase III Health Facilities Construction System priority list.	IHS HQ	

PHASE II

1. Ask ES to validate Phase I SSER results.	Area	ES
2. Ask ES to schedule the Phase II site study and prepare the SSER.	Area	Tribe
3. As necessary, request funds from IHS HQ for completion of Phase II site study.	Area	ES
4. Provide funds certification (HHS-393) to ES for implementing the Phase II.	IHS-HQ	
5. Obtain documentation from the BIA verifying that the selected site is available for the proposed facility and the site has been withdrawn from tribal inventory.	Area	
6. Schedule and conduct site visit(s) to evaluate the site.	ES	Area
7. Obtain and verify data required to complete the Phase II SSER.	ES	Area
8. Contact clearinghouses, committees, State and local officials, and other Federal agencies, as required, to obtain necessary permits and clearances, e.g. road access, Rights-of-way, etc.	ES	Area

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| 9. | Prepare and process an environmental assessment or an environmental impact statement when appropriate to ensure compliance with public laws/regulations relating to site(s), e.g., flood plain avoidance, archeological/historic preservation, etc. ES cannot complete the Phase II SSER until environmental clearance has been obtained from the Area Environmental Officer. | Area | ES |
| 10. | Complete Phase II SSER. | ES | Area |
| 11. | Review the Phase II SSER and recommend it for approval. Forward four signed copies to the Area. | ES | Area |
| 12. | Review the Phase II SSER and forward it to Associate Director, OEHE with the recommendation that it be approved. | Area | |
| 13. | Review and approve Phase II SSER and forward to the Director, IHS, for concurrence. | Associate Director, OEHE, IHS-HQ | IHS-HQ |
| 14. | Furnish approved copies of Phase II Report to ES and Area Office. | IHS-HQ | |
| 15. | Maintain and keep current the results of the SSER. | ES | Tribe, Area |
| 16. | Ensure that Phase II SSER has been completed for all Area projects on the Phase III Health Facilities Construction System priority list. | Area | |

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APPENDIX A - PHASE I PROTOTYPE REPORT

PHASE I

SITE SELECTION AND EVALUATION REPORT

INDIAN HEALTH SERVICE

[Name and Type of Facility]

[Location], [State]

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PHASE I

SITE SELECTION AND EVALUATION REPORT

INDIAN HEALTH SERVICE

[Name and Type of Facility]

[Location], [State]

Recommend Approval:

[Name]

Director

Engineering Services - **[Location]**

Date

Recommend Approval:

[Name]

Director

[Area name] Area Indian Health Service

Date

Approve:

[Name]

Director

Environmental Health and Engineering

Indian Health Service

Date

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PHASE I

TABLE OF CONTENTS

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- III. FACILITY SERVICES REQUIREMENT
- IV. SITE EVALUATION
- V. SITE RATING SUMMARY

TAB 1 - SITE RATING SHEETS

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I. EXECUTIVE SUMMARY

[The Executive Summary should be a succinct summarization of the report and should include at least the following:

A brief narrative that includes a description of the type, size and location of the proposed facility and the facility site requirements;

A list and description of the proposed sites which were evaluated and if applicable, their relationship to the existing facility;

The make up of the review team;

The methods used;

The date of the site investigation;

A brief description of the findings for each site; and

Recommendations for a site selection priority.]

II. FACILITY SITE REQUIREMENTS

[This portion of the report could be in a narrative format and would include the following:

Provide a brief description of the proposed facility, i.e. hospital, clinic, quarters, etc. giving the size in gross square meters (m²) of the proposed facility. Provide a table that shows the basic site requirements for the facility, quarters, any recreational facilities, and any special requirements for space.

For health care facilities, use the following table to determine site requirements:

AREA REQUIRED FOR HEALTH FACILITY

Health Facility Size (square meters)	Site Requirement (hectares)
0 - 2300	1-2
2 301 - 3 900	2-3
3 901 - 5 600	3-4
5 601 - 8 400	4-6
8 401 - 11 100	6-7
11 101 - 16 700	7-111
16 701 and greater	111 and greater

For quarters, the site requirement is determined by multiplying the number of quarters required times 0.135 hectares. Space for recreational facilities should be added equal to approximately 5 percent of the quarters site requirement. If space exceeding the 5 percent figure is requested it must be justified.]

The need for special facilities that would increase the site area beyond that required for the facility, quarters, or recreational

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facilities as stated above must be justified. Some things that may increase the site requirements are, airstrip, helipad, recreational facilities, etc.

The table must show the total site requirement for the location. This would be the sum of the facility requirement, quarters site requirement, and any special site requirements.

The availability of the site should be stated and copies of all documentation of the availability should be attached, including any tribal resolution designating the availability of sites for the proposed facility. (See Attachment I.)

III. FACILITY SERVICES REQUIREMENT

[The utility usages in this report will be estimates based on current design criteria for new facilities. Adjustments to the design criteria should be made if the figures used are inappropriate for the specific location (e.g., all electric; higher heating requirements; Alaska, etc.) A statement indicating the rationale for any change should accompany the report. The facility service requirements should be listed in tabular form.]

A. Water Supply

1. Proposed Facility Water Supply Requirements

HOSPITALS

[*]	Annual outpatient visits/250 days x 115 liters/visit includes persons accompanying patient)	= _____LPD**
[*]	Inpatient beds x 570 LPD/bed	= _____LPD
[*]	Number of staff x 115 LPD/staff	= _____LPD
	SUBTOTAL	= _____LPD

CLINICS OR HEALTH CENTERS

[*]	Annual outpatient visits/250 days x 115 liters/visit (includes persons accompanying patient)	= _____LPD
[*]	Number of staff x 115 LPD/staff	= _____LPD
	SUBTOTAL	= _____LPD

QUARTERS

*Must agree with the PJD.

**LPD = Liters per day

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[*] Number of quarters x 1325 LPD/quarters = _____LPD
[Estimated number of quarters for the facility]
SUBTOTAL = _____LPD

*Must agree with the PJD.

Proposed Facility Water Supply Requirements = _____LPD
[Hospital/Clinics + Quarters Requirements]

2. Existing Water Supply System.

a. Operating Utility: [Name, location]

b. Type of Supply System; [Describe the water supply system in detail. Include the type of source such as surface, wells, etc.; the type of treatment provided; and the quality of the water. A statement should be included concerning compliance of the water with the Safe Drinking Act.]

c. Water Storage: [Describe the type and size of storage available.]

Total storage volume _____ liters

Less fire flow reserve* _____ liters

Total usable storage _____ liters

Days of storage _____ DAYS

*If there is no usable fire flow reserve the water supply requirements must be increased to include sufficient capacity for fire flow requirements

d. Water Distribution: [Describe the distribution system, including any problems that may need to be corrected to accommodate the new facility.]

System pressure static: Maximum _____ kPa

Working Pressure: Minimum _____ kPa

Maximum flow nearest to proposed site: _____ LPS

e. Adequacy of System for Proposed Facility: [Describe the adequacy of the present water system to meet the proposed facility demand, including source, treatment, storage, distribution. Describe any deficiencies in the present system and upgrades required to meet proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e HUD, BIA, and tribal, including small individual housing construction, that

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may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated.]

B. Sewage Disposal

1. Proposed Facility Sewage Disposal Requirements

HOSPITALS

Total projected hospital water usage x 80% = _____ LPD

CLINICS/HEALTH CENTERS

Total projected clinic/health water usage x 80% = _____ LPD

QUARTERS

Total projected quarters water usage x 80% = _____ LPD

Proposed Facility Sewage Requirement
(Hospital/clinics + Quarters Requirement) = _____ LPD

2. Existing Sewage Disposal System

- a. Operating Utility: [Name, location]
- b. Type of Disposal System: [Describe the sewage disposal system in detail. Include the type and extent of the sewage collection system and the capacity and type of treatment system.]
- c. Adequacy of System for Proposed Facility: [Describe adequacy of present system to meet proposed facility demand, including collection and treatment systems. Describe any deficiencies in the present system and any required upgrade to the system to meet the proposed facility demand. Include necessary extension of the collection system or an expansion of the treatment system. If possible consider all other proposed developments, i.e HUD, BIA, and tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated.]

C. Electric

1. Proposed Facility Electric Requirements

HOSPITALS

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_____ m² x 143 kWh/m²/yr = _____ kWh/yr

_____ m² x 0.111 kVA/m² = _____ kVA demand

Assumed Energy Budget 475 kWh/m²/yr
70% fuel, 30% electric

CLINICS/HEALTH CENTERS

_____ m² x 48 kwh/m²/yr = _____ kwh/yr

_____ m² x 0.111 kVA/m² = _____ kVA demand

Assumed Energy Budget 158 kWh/m²/yr
70% fuel, 30% electric

QUARTERS

_____ m² x 33 kWh/m²/yr = _____ kwh/yr

_____ m² x 0.01 kVA/m² = _____ kVA demand

Assumed Energy Budget 111 kWh/m²/yr
70% fuel, 30% electric

Proposed Facility Electric Requirement = _____ kWh/yr

(Hospital+clinics + Quarters Requirement) = _____ kVA demand

2. Existing Electrical Power Supply System

- a. Operating Utility: [Name, location]
- b. Type of Electric System; [Describe the type and extent of electrical system in detail. Include system characteristics such as available voltage and phase, quality of the power (i.e. the differences in amplitude of the phases.)]
- c. Reliability of Electric System: [Discuss reliability of electric system including frequency and duration of outages and historical data.]
- d. Adequacy of System for Proposed Facility: [Describe the adequacy of the present system to meet proposed facility demand, including generation and distribution systems. Describe any deficiencies in the present system and any required upgrades to the system needed to meet the proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e. HUD, BIA, and tribal, including small individual housing]

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construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated.]

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D. Fuel

1. Proposed Facility Fuel Requirement

HOSPITALS

_____ m ² x 30 m ³ /m ² /Yr.. (Gas)	_____ m ³ /Yr.
_____ m ² x 0.02 m ³ /m ² /Hr (Gas)	_____ m ³ /hr demand
_____ m ² x 45 liters/m ² /Yr. (Propane)	_____ liters/Yr.
_____ m ² x 0.04 liters/m ² /Yr. (Propane)	_____ liters/Yr. demand
_____ m ² x 30 liters/m ² /Yr. (Oil)	_____ liters/Yr.
_____ m ² x 0.02 liters/m ² /Yr. (Oil)	_____ liters/Yr. demand

Assumed Energy Budget 17111 MJ/m²/Yr.
70% fuel, 30% electric

CLINIC/HEALTH CENTERS

_____ m ² x 111 m ³ /m ² /Yr. (Gas)	_____ m ³ /Yr.
_____ m ² x 0.01 m ³ /m ² /Hr (Gas)	_____ m ³ /hr demand
_____ m ² x 15 liters/m ² /Yr. (Propane)	_____ liters/Yr.
_____ m ² x 0.01 liters/m ² /Yr. (Propane)	_____ liters/Yr. demand
_____ m ² x 111 liters/m ² /Yr. (Oil)	_____ liters/Yr.
_____ m ² x 0.01 liters/m ² /Yr. (Oil)	_____ liters/Yr. demand

Assumed Energy Budget 570 MJ/m²/Yr.
70% fuel, 30% electric

QUARTERS

_____ m ² x 8 m ³ /m ² /Yr. (Gas)	_____ m ³ /Yr.
_____ m ² x 0.01 m ³ /m ² /Hr	_____ m ³ /Hr demand
_____ m ² x 111 liters/m ² /Yr. (Propane)	_____ liters/Yr.
_____ m ² x 0.01 liters/m ² /Hr	_____ liters/Hr demand
_____ m ² x 7 liters/m ² /Yr. (Oil)	_____ liters/Yr.
_____ m ² x 0.01 liters/m ² /Hr	_____ liters/Hr demand

Assumed Energy Budget 399 MJ/m²/Yr.
70% fuel, 30% electric

Proposed Facility Fuel Requirements
Hospitals/Clinics + Quarter

Gas	_____ m ³ /Yr
	_____ m ³ /Hr demand
Propane	_____ liters/Yr.
	_____ liters/Hr demand
#2 Oil	_____ liters/Yr.
	_____ liters/Hr demand

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2. Existing Fuel Supply
 - a. Operating Utility: [Name , Location]
 - b. Type of Fuel: [Describe type and extent of present fuel system including storage and distribution system. If no facility exists in this location describe the type of fuel available in the general area.]
 - c. Reliability of Fuel Supply: [Discuss historical data relating to fuel supply including availability during peak needs.]
 - d. Adequacy of Supply for Proposed Facility: [Describe the adequacy of the present supply to meet proposed facility demand including storage and distribution systems. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of the distribution system and expansion of the storage facilities. If possible consider all other proposed developments, i.e. HUD, BIA, and Tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility.]

E. Solid Waste

1. Existing Solid Waste System
 - a. Operating Utility: [Name , Location]
 - b. Type of Disposal System: [Describe the type of solid waste collection system, frequency of pick-up and type and distance to the nearest EPA approved solid waste disposal system.]
 - c. Reliability of Solid Waste Disposal System: [Discuss reliability of system including scheduled and unscheduled collections.]
 - d. Adequacy of collection and disposal systems for the proposed facility: [Describe the adequacy of the present solid waste collection and disposal system in meeting the proposed facility demand. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e, HUD, BIA, and Tribal, including small individual

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housing construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated.]

F. Hazardous Waste Disposal

1. Existing Hazardous Waste System
 - a. Operating Utility: [Name , Location]
 - b. Type of Disposal System: [Describe the type of hazardous waste collection system, frequency of pick-up and type and distance to the nearest disposal location.]
 - c. Reliability of Hazardous Waste Disposal System: [Discuss reliability of system including scheduled and unscheduled collections.]
 - d. Adequacy of collection and disposal systems for the proposed facility: [Describe the adequacy of the present hazardous waste collection and disposal system in meeting the proposed facility demand. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of distribution system. The system serving each individual site must be reviewed and evaluated.]

G. Telephone

1. Existing Telephone System
 - a. Operating Utility: [Name , Location]
 - b. Type of Telephone System: [Describe the type of telephone system used in the present facility owned or leased equipment. Describe the distribution system (trunk lines, etc.)]
 - c. Reliability of Telephone System: [Discuss historical reliability of system including down time and frequency of repair.]
 - d. Adequacy of System for Proposed Facility: [Describe adequacy of present system to meet proposed facility demand including headend and distribution systems. Describe any deficiencies in the present system and required upgrades to the system to meet proposed

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facility demand including extension of distribution system. If possible consider all other proposed developments, i.e HUD, BIA, and Tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility. The system serving each individual site must be reviewed and evaluated.]

IV. SITE EVALUATION

IHS Area Office [Name, Location]

Proposed Facility [Name, Location]

SITE REQUIREMENTS

Hospital	[] ha
Clinic	[] ha
Quarters	[] ha
Special Considerations	[] ha
Total Site Requirements	[] ha

Site #

1. Size: [] ha
2. Location: [Describe site location in relation to nearest town, etc. and if applicable, existing IHS facility. Attach and reference site map and area map indicating proposed site and its relationship to other proposed sites and the site of the existing facility as applicable.]
3. Topography: [Describe general terrain and topographic features of the site.]
4. Surface Water: [Identify any surface water on site and describe as applicable.]
5. Type of Soil: [Describe general characteristics of soil at the site.]
6. Flood Clearance: [Reference and attach flood plain certification or explain if no certification is available.]
7. Archaeological Clearance: [Reference and attach any archaeological surveys that have been completed or explain if archaeological surveys have not been completed. Note that if costs are to be incurred in obtaining an archaeological survey, it can be delayed until the Phase II Site survey.]

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8. Access: [Describe existing road system and access to the site and any improvements that might have to be made to reach the site. Verify that access to other roadways is not restricted by other agencies. Determine any easement requirements]
9. Social: [Describe churches, theaters, etc. within the immediate area of the site.]
10. Amenities: [Describe restaurants, schools, recreational facilities, shopping facilities, etc., within the immediate area of the site.]
11. Transportation: [Describe railroad, airport, bus, and private transportation available within the immediate area of the site.]
12. Air: [Describe any air pollution or air quality problems within the immediate area of the site.]
13. Visual: [Describe visual features in the immediate area of the site and identify desirable and undesirable features.]
14. Climate: [Briefly describe the local climate and address the site and climate vis-a-vis solar applications.]
15. Fire Protection: [Describe fire fighting capability in the immediate area of the site including distance to nearest fire station, type of equipment, volunteer vs. full-time, etc.]
16. Unique Considerations: [Describe any unique features in the immediate area of the site including airports, airstrips, industrial activities, etc.]

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V. SITE RATING SUMMARY

[List members of rating team and their affiliation and qualifications, date of site survey and method of site rating. Summarize ratings on table below and refer to completed and signed rating sheets as Appendix 1.]

Summary of All Raters

	Site #1 <u>WTD Rating</u>	Site #2 <u>WTD Rating</u>	Site #3 <u>WTD Rating</u>
Rater #1	_____	_____	_____
Rater #2	_____	_____	_____
Rater #3	_____	_____	_____
Rater #4	_____	_____	_____
TOTALS	_____	_____	_____

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ATTACHMENT 1
PHASE I SITE SELECTION

SITE RATING
SHEET

Date _____

Raters Name _____

Proposed Facility Name & Location _____

	SITE #	SITE #	SITE #
SITE SELECTION PARAMETERS	RATING	WT	RATING
IMPACT ON COMMUNITY			
Services	x 2		x 2
Labor	x 2		x 2
Education	x 2		x 2
Community Planning	x 3		x 3
Housing	x 2		x 2
Recreation	x 1		x 1
Medical Services	x 2		x 2
EMPLOYEE & USER CONSIDERATION			
Housing	x 2		x 2
Transportation	x 2		x 2
Shopping & Eating	x 2		x 2
Recreation	x 1		x 1
Education	x 2		x 2
Religion, Art Cultural, Etc.	x 2		x 2
Personal Protection	x 3		x 3
Employee Health Service	x 2		x 2
Accessibility (Handicapped)	x 3		x 3
PHYSICAL PARAMETERS			
Site Location	* x 4		* x 4
Type of Terrain	* x 3		* x 3
Vegetation Conditions	* x 3		* x 3
Soil Conditions	* x 3		* x 3
Water Supply Availability	* x 4		* x 4
Water Supply Adequacy	* x 4		* x 4
Sanitary Sewer Availability	* x 4		* x 4
Sanitary Sewer Adequacy	* x 4		* x 4

* See Page 3 of 3 for factors to be used in these elements

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ATTACHMENT 1

PHASE I SITE SELECTION

	SITE #		SITE #		SITE #
SITE SELECTION		WTD.		WTD.	
PARAMETERS	RATING WT	RATING	RATING WT	RATING	RATING WT
Electric Power					
Availability	* <u> </u> x <u> </u> 4	* <u> </u> x 4	* <u> </u> x 4	* <u> </u> x 4	* <u> </u> x 4
Electric Power Adequacy	* <u> </u> x 4	* <u> </u> x 4	* <u> </u> x 4	* <u> </u> x 4	* <u> </u> x 4
Fuel Availability	* <u> </u> x 4	* <u> </u> x 4	* <u> </u> x 4	* <u> </u> x 4	* <u> </u> x 4
Fuel Adequacy	* <u> </u> x 4	* <u> </u> x 4	* <u> </u> x 4	* <u> </u> x 4	* <u> </u> x 4
Telephone Services	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Fire Protection	<u> </u> x 4	<u> </u> x 4	<u> </u> x 4	<u> </u> x 4	<u> </u> x 4
Drainage (Flood Plain)	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Aesthetics	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Archaeological	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Climate	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Access	<u> </u> x 4	<u> </u> x 4	<u> </u> x 4	<u> </u> x 4	<u> </u> x 4
ENVIRONMENTAL CONSIDERATION					
FACILITY TO Community					
Noise	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Air Pollution	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Visual Pollution	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Water	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Sewer	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Solid Waste	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Aesthetics	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Ecology	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Transportation	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Traffic	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
ENVIRONMENTAL CONSIDERATION-					
COMMUNITY TO FACILITY					
Noise	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Air Pollution	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Visual Pollution	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Water	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Sewer	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Solid Waste	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
EMF**	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Aesthetics	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Ecology	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Transportation	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Traffic	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
PROGRAM SUITABILITY					
Adequate size of site	<u> </u> x 4	<u> </u> x 4	<u> </u> x 4	<u> </u> x 4	<u> </u> x 4
Bldg.. Constraints	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Support Services	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
Other benefits available to Indian populace	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3	<u> </u> x 3
TOTAL WEIGHTED RATING	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

* See Page 3 of 3 for factors to be used in these elements

** EMF = Electromagnetic Forces (High Voltage Power Lines)

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ATTACHMENT 1
PHASE I SITE SELECTION

WEIGHT FACTORS:

- 1 - Minimal importance
- 2 - Moderately more than minimal importance
- 3 - Moderately less than high in importance
- 4 - High in importance

RATING:

- 1 - Poor
- 2 - Fair
- 3 - Good
- 4 - Average
- 5 - Optimum

*Ratings for these items are as listed below in conjunction with the IHS Budget Cost Estimating System. These factors and ratings should be consistent with those used in budget cost estimates for the proposed facility.

Site Location

Within Established Community
Other Buildings Adjacent
Virgin Isolated Site

5 Adjacent to Site
4 Within 150 meters
3 > 150 meters, < 460 meters

5
4
3

Type of Terrain

Level
Broken
Hilly

5 Yes
4 No
3

Sanitary Sewer Adequacy

5
2

Vegetation Conditions

Open
Slightly Treed
Treed

5 Adjacent to Site
4 Within 150 meters
3 > 150 meters, < 460 meters

5
4
3

Soil Conditions

Normal Soil
Rock Conditions
Permafrost/Special Soil Conditions

5 Yes
4 No
3

Electrical Power Adequacy

5
2

Water Supply Availability

Adjacent to Site
Within 150 meters
> 150 meters, < 460 meters

5 Adjacent to Site
4 Within 150 meters
3 > 150 meters, < 460 meters

5
4
3

Water Supply Adequacy

Yes
No

5 Yes
2 No

Fuel Adequacy

APPENDIX B - PHASE II PROTOTYPE REPORT

PHASE II

SITE SELECTION AND EVALUATION REPORT

INDIAN HEALTH SERVICE

[Name and Type of Facility]

[Location], [State]

[Month] [Year]

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PHASE II

SITE SELECTION AND EVALUATION REPORT

INDIAN HEALTH SERVICE

[Name and Type of Facility]

[Location], [State]

Recommend Approval:

[Name]

Director

Engineering Services - **[Location]**

Date

Recommend Approval:

[Name]

Director

[Area name] Area Indian Health Service

Date

Approve:

[Name]

Associate Director

Office of Environmental Health and Engineering

Indian Health Service

Date

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PHASE II

TABLE OF CONTENTS

- I. EXECUTIVE SUMMARY
- II. VALIDATION OF PHASE I SITE SELECTION AND EVALUATION REPORT
- III. SITE EVALUATION DATA
- IV. COMMUNITY DATA
- V. TECHNICAL EVALUATION
- VI. ENVIRONMENTAL ASSESSMENT
- VII. FINAL CONCLUSIONS AND RECOMMENDATIONS

TABS

- 1.
- 2.

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I. EXECUTIVE SUMMARY

A. Conclusions and Recommendations

[Briefly state the results of the Phase II Site Selection and Evaluation Report including a summary of the Phase I SSER, Phase II Site Evaluation Base Data, Technical Evaluation, and Environmental Assessment and final recommendations.]

B. Cost Impacts

[Summarize unusual or additional costs that must be added to the project budget, which were *not addressed in the Phase I Report or those that have increased for some reason since that report was prepared*. These costs might include, site acquisition, utility services, soil conditions, drainage problems (on-site or off-site), archaeologic or historic impacts, etc. Data should also be included for other project related costs such as staff housing, demolition of existing buildings, and/or asbestos abatement of existing buildings, easements and special access requirements, etc.]

II. VALIDATION OF PHASE I SITE SELECTION REPORT

Review the Phase I Site Selection Report and the Phase II Site Evaluation Base Data is as follows:

[Review the Phase I SSER to assure that the assumptions and determinations upon which the recommendations setting the Phase I ranking are still valid, the site is still available and tribal entities are still in agreement. The data as prescribed in Section III, Site Evaluation Base Data will be used for this review. Summarize the results of the analysis of the Phase I SSER and highlight any special considerations that must be taken into account before proceeding with the project. Documentation from the BIA must be included in the Phase II Report to indicate that the selected site is available and has been withdrawn from the tribal land inventory.]

III. SITE EVALUATION BASE DATA

[This portion of the report could be in a narrative format and would include the following:

A. Proposed Facility Base Data

1. Proposed Facility

Provide a brief description of the proposed facility, (new, addition, modernization, quarters, etc) outline of proposed health services to be

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provided. Give the size of the facility in gross square meters (m²). List the basic site requirement in hectares(ha). *This data must agree with the POR.]*

2. Gross area of proposed facility [] m²
3. Number of proposed inpatient beds []
4. Number of proposed staff []

B. Total Site Requirement

1. Proposed Health Facility:

[Same as A.2] m² ÷ 10 000 = [] ha

(See Phase I Facility Site Requirement Table "Area Required for Health Facility", the table is reproduced here for reference).

AREA REQUIRED FOR HEALTH FACILITY

Health Facility Size (square meters)	Site Requirement (hectare)
0 - 2 300	1 - 2
23 111 - 3 900	2 - 3
39 111 - 5 600	3 - 4
56 111 - 8 400	4 - 6
84 111 - 1 11 100	6 - 7
1 111 111 - 1 167 000	7 - 111

List any special site requirements that would increase the site area beyond those listed above. If this is different that the special site requirements listed in the Phase I Site Selection and Evaluation Report it must be justified in the Phase II report. Some things that may increase the site requirements are, airstrip, helipad, recreational facilities, etc.

List the total site requirement for the location. This would be the sum of the basic site requirement, quarters site requirement, and any special site requirements. The site requirements must include areas for all components of the facility.

The availability of the site should be reconfirmed. (Please reference and attach (Tab B) a copy of the tribal resolution designating the availability of the site for the proposed facility.)]

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2. Proposed Housing: (If there are no housing units to be constructed so note, and skip to Item 3 below.)

[A single site is preferred for both the health facility and the associated quarters to minimize site development cost. Situations at certain locations may warrant or dictate separate sites. The site requirement is obtained from the following procedure:]

- a. Total Housing Unit Required []
- (1) Total units [] x 40% [] 3 bedroom units
- (2) Total units [] x 30% [] 2 bedroom units
- (3) Total units [] x 30% [] 1 bedroom units
- b. Attached vs. Detached Units
- (1) Attached units
- (a) All of the 1 and 2 bedroom units []
- (b) 1/3 of 3 bedroom units []
- (c) Total attached [(a)+(b)] []
- (2) Detached units
- (a) 2/3 of 3 bedroom units []
- c. Housing Area Site
- (1) [] Number of detached units x 0.135 Hectars []
- (2) [] Number of attached units x 0.1112 []
- (3) Sub total of housing area [(1)+(2)] []
- d. Recreational area. Recreation areas are essential and should represent at least 5 percent of the residential area. This figure could be increase if the individual lots are small or there is a large percentage of the quarters units in attached units. If a figure other than 5 percent is used it must be justified.
- [Item B,2,c,(3) above x 0.05] []
- Total Housing Area required.
[Item B,2,c,(3)+Item B,2,d] []

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3. Proposed parking

(Most IHS facilities will require parking lots for staff and patient parking. Use the following procedure to determine the area required for parking. The information must agree with that used in the POR.)

FACILITY PARKING		Parking Spaces
a.1	Inpatient Facility (Hospital) [A.4 above] Staff x 0.8	[]
a.2	Outpatient Facility (Health center) [A.4 above] Staff x 0.95	[]
b.	Car Pooling 3 of 4 staff drive their own car: (a1 or a2 above) x 0.75	[]
c.	If staff quarters are within 0.8 km for facility: b x .8	[]
d.	SUBTOTAL: STAFF PARKING (Line b or c as applicable)	[]
VISITORS AND PATIENT		Parking Spaces
e.	Inpatient Beds X)1)	[]
f.	Annual OPV x (0.002)	[]
g.	Annual Dental Minutes x (.00004)	[]
h.	SUBTOTAL: VISITOR AND PATIENT PARKING (e + f + g)	[]
GOVERNMENT VEHICLES		
i.	Professional and Technical Community Health Staff X 1	[]
j.	General Use Vehicles X 1	[]
l.	SUBTOTAL: GOVERNMENT VEHICLES (i + j)	[]
OTHER VEHICLES		
m.	Additional parking may be required for buses. Provide a minimum of 1 space per facility. Justify need for more.	[]
TOTAL PARKING SPACES (d + h + k + l)		[]
TOTAL PARKING AREA (Total Parking spaces x 0.003515)		Hectares []

4. Area Required

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- a. Direct Use []
[Sum of areas for health facility, housing and parking]
- b. Buffer between areas [15% x a] []
- c. Special Requirements []
[Identify and justify any special requirement, i.e., recreational facilities, airstrips, heliports, etc.]
- d. Total area required [Sum of 4.a, b, & c,] []

IV. COMMUNITY DATA

A. Location

[Describe the community where the site is located including the surrounding area. Include the location within the State and distances from major cities.]

B. Population

[Describe population of the community and surrounding area.]

C. Topography and Climate

[Describe topography and pertinent features of the community and surrounding area. Also reference local climate including average and extreme temperatures throughout the year, amounts and type of precipitation, wind velocity and direction, and any unique climatic conditions.]

D. Housing

[Describe type and condition of housing in the community and surrounding area. The description given here should relate to housing that may be available for future non-local hire staff, not the housing available to local residences or local hire staff, i.e. HUD housing, Tribal housing, etc.]

E. Economy and Employment

[Describe existing commercial, industrial and agricultural enterprises in the community and surrounding area. Include types of employment available and unemployment rates. This data should apply to the incoming non-local hire staff and should therefore include the non-Indian unemployment rates or the overall rate.]

F. Transportation

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[Describe access to the community and surrounding area from larger population centers and major cities via highways and identify types and availability of other means of transportation including railroad, bus, and airlines. This would not include the local tribal bus system normally to used transport local residents to and from shopping etc.]

G. Community Services

[Describe services available in the community and surrounding area including educational opportunities, medical and dental care, fire and police protection, retail services, and recreational opportunities. These should give some idea of the services and amenities that would be available to non-local hire staff and their families.]

V. TECHNICAL EVALUATION

A. Basic Requirements for the facility site

[Restate the basic site and service requirements needed to accommodate the proposed project. The facility site requirements set forth in the Phase I SSER, Section II Facility Site Requirements, must be reviewed and validated.]

1. Water Needs: *[Include demand in liters per day (LPD), pressure, and fire flow requirements.]*

a. Proposed Facility Water Supply Requirements

HOSPITALS

[*]	(Annual OPV/250 days) x 115 liters/visit (includes persons accompanying patient)	[]LPD
[*]	Inpatient beds x 570 LPD/bed	[]LPD
[*]	Number of staff x 115 LPD/staff	[]LPD
	SUBTOTAL	[]LPD

CLINICS OR HEALTH CENTERS

[*]	(Annual OPV/250 days) x 115 liters/visit (includes persons accompanying patient)	[]LPD
[*]	Number of staff x 115 LPD/staff	[]LPD
	SUBTOTAL	[]LPD

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[* Must agree with data in PJD]

QUARTERS

[] Number of quarters x 1325 []LPD
LPD/quarters [**Estimated number
of quarters for the facility**]

TOTAL [Hospitals + Clinics + []LPD
Quarters Requirements]

b. Existing Water Supply System.

(1) Operating Utility: [Name, location]

(2) Type of Supply System; [**Describe the water
supply system in detail. Include the type
of source such as surface, wells, etc.; the
type of treatment provided; and the quality
of the water. A statement should be
included concerning compliance of the water
with the Safe Drinking Act.**]

(3) Water Storage: [**Describe the type and size
of storage available.**]

Total storage volume [] liters

Less fire flow reserve [] liters

Total usable storage [] liters

Days of storage [] Days

(4) Water Distribution: [**Describe the
distribution system, including any problems
that may need to be corrected to accommodate
the new facility.**]

System pressure static: Maximum [] kPa

Working Pressure: Minimum [] kPa

Maximum flow nearest to proposed site: []LPS

c. Adequacy of System for Proposed Facility:
[**Describe the adequacy of the present system to
meet the proposed facility demand, including
source, treatment, storage, distribution.
Describe any deficiencies in the present system
and required upgrades to the system to meet
proposed facility demand including extension of**

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distribution system. If possible consider all other proposed developments, i.e HUD, BIA, and tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility.]

2. Sewage Disposal: *[Include minimum requirements for sewage collection and disposal from the health facility, expressed in LPD. In other words what will be the impact of this facility on the existing sewage disposal system, or what will be the size of system that will have to be constructed.]*

- a. Proposed Facility Sewage Disposal Requirements

HOSPITALS

Total projected hospital water usage x 80%
[] LPD

CLINICS/HEALTH CENTERS

Total projected clinic/health water usage x 80%
[] LPD

QUARTERS

Total projected quarters water usage x 80%
[] LPD

Proposed Facility Sewage Requirement
(Hospital/clinics + Quarters Requirement)
[] LPD

- b. Existing Sewage Disposal System

(1) Operating Utility: **[Name, location]**

(2) Type of Disposal System: **[Describe the sewage disposal system in detail. Include the type and extent of the sewage collection system and the capacity and type of treatment system.]**

- c. Adequacy of System for Proposed Facility:
[Describe adequacy of present system to meet proposed facility demand, including collection system and treatment system. Describe any deficiencies in the present system and any required upgrade to the system to meet the proposed facility demand. Include necessary

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extension of the collection system or an expansion of the treatment system. If possible consider all other proposed developments, i.e HUD, BIA, and tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility.]

3. Electric Service: [Describe the expected demand with expansion factor including voltage required, phasing, necessity for emergency generator, etc.]

a. Proposed Facility Electric Requirements

HOSPITALS

[] m² x 143 kwh/m²/yr [] kw/yr

[] m² x 0.111 kVA/m² [] kVA demand

Assumed Energy Budget 475 kWh/m²/yr
70% fuel, 30% electric

CLINICS/HEALTH CENTERS

[] m² x 48 kwh/m²/yr [] kwh/yr

[] m² x 0.111 kVA/m² [] kVA demand

Assumed Energy Budget 158 kWh/m²/yr
70% fuel, 30% electric

QUARTERS

[] kWh/m²/yr [] kWh/yr

[] m² x 0.01 KVA/m² [] kVA demand

Assumed Energy Budget 111 kWh/m²/yr
70% fuel, 30% electric

Proposed Facility Electric Requirement [] MJ/yr

(Hospital/clinics + Quarters Requirement) [] kVA demand

b. Existing Electrical Power Supply System

(1) Operating Utility: [Name, location]

(2) Type of Electric System; [Describe the type and extent of electrical system in detail. Include system characteristics such as available voltage

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and phase, quality of the power (i.e. the differences in amplitude of the phases.]

- (3) Reliability of Electric System: [Discuss reliability of electric system including frequency and duration of outages and historical data.]

- c. Adequacy of System for Proposed Facility: [Describe the adequacy of the present system to meet proposed facility demand, including generation and distribution systems. Describe any deficiencies in the present system and any required upgrades to the system needed to meet the proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e. HUD, BIA, and tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility.]

4. Fuel: [Describe the expected demand with expansion factor including type of fuel such as, fuel oil, natural gas, or LP gas.]

- a. Proposed Facility Fuel Requirement

HOSPITALS

[] m ² x 30 m ³ /m ² /Yr. (Gas)	[] m ³ /Yr.
[] m ² x 0.02 m ³ /m ² /Hr (Gas)	[] m ³ /hr. demand
[] m ² x 45 liters/m ² /Yr. (Propane)	[] liters/Yr.
[] m ² x 0.04 liters/m ² /Yr. (Propane)	[] liters/Yr. demand
[] m ² x 30 liters/m ² /Yr. (Oil)	[] liters/Yr.
[] m ² x 0.02 liters/m ² /Yr. (Oil)	[] liters/Yr. demand

Assumed Energy Budget 17111 MJ/m²/Yr.
70% fuel, 30% electric

CLINIC/HEALTH CENTERS

[] m ² x 111 m ³ /m ² /Yr. (Gas)	[] m ³ /Yr.
[] m ² x 0.01 m ³ /m ² /Hr (Gas)	[] m ³ /hr demand
[] m ² x 15 liters/m ² /Yr. (Propane)	[] liters/Yr.
[] m ² x 0.01 liters/m ² /Yr. (Propane)	[] liters/Yr. demand
[] m ² x 111 liters/m ² /Yr. (Oil)	[] liters/Yr.
[] m ² x 0.01 liters/m ² /Yr. (Oil)	[] liters/Yr. demand

Assumed Energy Budget 570 MJ/m²/Yr.
70% fuel, 30% electric

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QUARTERS

[] m ² x 8 m ³ /m ² /Yr. (Gas)	[] m ³ /Yr.
[] m ² x 0.01 m ³ /m ² /Hr	[] m ³ /hr demand
[] m ² x 111 liters/m ² /Yr. (Propane)	[] liters/Yr.
[] m ² x 0.01 liters/m ² /Hr	[] liters/Hr
	demand
[] m ² x 7 liters/m ² /Yr. (Oil)	[] liters/Yr.
[] m ² x 0.01 liters/m ² /Yr.	[] liters/Hr
	demand

Assumed Energy Budget 399 MJ/m²/Yr.
70% fuel, 30% electric

Proposed Facility Fuel Requirements Hospitals/Clinics + Quarter

Gas	_____	m ³ /Yr.
	_____	m ³ /Hr demand
Propane	_____	liters/Yr.
	_____	liters/Hr demand
#2 Oil	_____	liters/Yr.
	_____	liters/Hr demand

b. Existing Fuel Supply

- (1) Operating Utility: **[Name , Location]**
- (2) Type of Fuel: **[Describe type and extent of present fuel system including storage and distribution system. If no facility exists in this location describe the type of fuel available in the general area.]**
- (3) Reliability of Fuel Supply: **[Discuss historical data relating to fuel supply including availability during peak needs.]**

c. Adequacy of Supply for Proposed Facility:
[Describe the adequacy of the present supply to meet proposed facility demand including storage and distribution systems. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of the distribution system and expansion of the storage facilities. If possible consider all other proposed developments, i.e. HUD, BIA, and Tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility.]

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5. Solid Waste Disposal: [Include the estimated amount of solid waste, (infectious, hazardous, and normal) that is expected to be generated by the health facility and staff quarters. State the requirements for special handling of wastes and disposal methods.]
 - a. Existing Solid Waste System
 - (1) Operating Utility: [Name , Location]
 - (2) Type of Disposal System: [Describe the type of solid waste collection system, frequency of pick-up and type and distance to the nearest EPA approved solid waste disposal system.]
 - (3) Reliability of Solid Waste Disposal System: [Discuss reliability of system including scheduled and unscheduled collections.]
 - b. Adequacy of collection and disposal systems for the proposed facility: [Describe the adequacy of the present solid waste collection and disposal system in meeting the proposed facility demand. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e HUD, BIA, and Tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility.]
6. Hazardous Waste Disposal [Include the estimated amount of, hazardous waste that is expected to be generated by the health facility. State the requirements for special handling of wastes and disposal methods.]
 - a. Existing Hazardous Waste System
 - (1) Operating Utility: [Name , Location]
 - (2) Type of Disposal System: [Describe the type of hazardous waste collection system, frequency of pick-up and type and distance to the nearest disposal location.]

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- (3) Reliability of Hazardous Waste Disposal System: **[Discuss reliability of system including scheduled and unscheduled collections.]**
 - b. Adequacy of collection and disposal systems for the proposed facility: **[Describe the adequacy of the present hazardous waste collection and disposal system in meeting the proposed facility demand. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand.]**
7. Telephone Service: **[Describe type of telephone service required, including the number of lines needed.]**
- a. Existing Telephone System
 - (1) Operating Utility: **[Name , Location]**
 - (2) Type of Telephone System: **[Describe the type of telephone system used in the present facility. Describe the distribution system (trunk lines, etc.)]**
 - (3) Reliability of Telephone System: **[Discuss historical reliability of system including down time and frequency of repair.]**
 - b. Adequacy of System for Proposed Facility: **[Describe adequacy of present system to meet proposed facility demand including headend and distribution systems. Describe any deficiencies in the present system and required upgrades to the system to meet proposed facility demand including extension of distribution system. If possible consider all other proposed developments, i.e HUD, BIA, and Tribal, including small individual housing construction, that may affect adequacy of the overall system to meet the needs of the health facility.]**

B. Utilities and Related Systems.

- 1. **[Recap availability, adequacy, and reliability of fuel sources; electric power; telephone systems; domestic water supply system including fire protection; and sewage and solid waste collection and disposal systems.]**

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2. [Describe and attach certification from local utility companies as to availability, use, and adequacy of existing utilities for the proposed facility.]
 3. [Describe connections and/or extension requirements for all utilities.]
 4. [Describe any possible solar or other natural energy supplementary considerations related to proposed site and facility.]
- C. Size of Site and basic site attributes: *[This would be the size determined in the Phase I SSER and verified in this report. [From III. B. 4. d.] ha [Describe basic site and service features of the site that contribute to this site accommodating the proposed project. The facility site requirements set forth in the Phase I SSER, Section II Facility Site Requirements must be reviewed and validated.]*
1. Site Features [Describe in this section the features of the site as they relate to the requirements described in Section V. A, "Basic Requirements for the facility Site". Note any deficiencies of the proposed site and possible solutions to overcome those deficiencies.]
 - (a) [Discuss topographic data including natural features, soil and foundation considerations and hazards such as seismic, local surface drainage, including up and down stream capacities, unsuitable soil, steep slopes or other unusual surface problems and other geological features that may impact the site preparation costs of the facility.]
 - (b) [Describe natural features such as trees, undergrowth, rock outcroppings and water forms that are to be preserved or utilized as a design element or may present a design problem.]
 - (c) [Describe and attach metes and bounds survey showing the configuration and area of the proposed site, indicate any restrictions, easements or other legal infringements on the proposed site.]
 - (d) [Describe characteristics and land use (existing and proposed) of adjacent properties including grade, elevations and heights and nature improvements.]

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- (e) [Identify any cultural entities including indigenous building materials, art forms *in the surrounding local area* and/or functional configurations to be used in design of the proposed facility.]
 - (f) [Indicate all existing improvements on the proposed site such as roads, streets, walks, parking areas, buildings, structures, and utilities including size and capacities. If utilities and roads are not on or adjacent to the proposed site, describe the distance and cost of any connection or extension needed. Describe the adequacy of the system to handle impact imposed on it by the new facility.]
- 2. Site Access: [Describe requirements for site access.]
[*This should include such things as width of road required, is pavement needed, pedestrian walkways etc.*]
 - (a) [Describe site location with reference to the population center to be served.]
 - (b) [Describe present and planned roads and highways in vicinity of proposed site including conflicts and congestions, need for traffic controls, and vehicular and pedestrian influences. Include any easement requirements, state or tribal approval needed for access to roads, etc.]
 - (c) [Describe access to proposed site.]
 - (d) [Describe accessibility of site to local fire fighting units.]
- 3 Site Orientation: [Describe site orientation relative to site access, prevailing wind, cultural needs of the people served, etc.]
- 4 Other Requirements: [Justify and document any unique requirements related to the proposed site and project.]
- D Transportation Services: [Describe transportation services required and any specific needs for air service including helipads, etc. Describe public transportation systems in the vicinity of proposed site.]
- E External Influences
 - 1. [Describe any present planned community use and development in the area of the proposed site.]

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2. [Describe historical and/or archaeological considerations in the area of the proposed site.]
3. [Describe compatibility of proposed facility with existing and planned facilities in area.]
4. [Describe any visual blight, and any noise, air, water or solid waste pollution in the area of the proposed site including sources of pollution.]
5. [Describe floodplain or water drainage hazards in the proposed site area.]
6. [Describe seismic zone considerations in the area of the proposed site.]
7. [Discuss climatic features of the area including temperature ranges (degree, days, etc.), humidity ranges, rainfall, snowfall, prevailing winds and any other unique climatic conditions.]
8. [Discuss location factors associated with the construction of the proposed site including availability of material, labor and housing for construction, and facility operation; local population and distribution; and tribal economy and resources.]

F. Evaluation and Discussion

[Include specific statements and discussions covering all the parameters and subject matter investigated in accordance with Section A of this part. Consider alternative solutions to problems envisioned. Include consideration of any projects related to new facility (solar systems, etc.). Provide adequate data and discussion for project managers, A/E firms, etc., to clearly understand site problems that may be encountered in designing and building facility. Provide details of cost impacts.]

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G. Additional Data

[Include and list as a minimum the following tabs.
Additional tabs as required may be included for community
data, correspondence, soil boring data, etc.]

Tab A1.	Map(s) of Service Unit
Tab A2	Map(s) of local area [including location of proposed site and if applicable, relation to existing facility]
Tab A3.	Site Plan(s)
Tab A4.	Proposed site access plan
Tab B.	Tribal Resolutions relating to proposed site
Tab C.	Site survey plan(s) and use plan(s)
Tab D.	BIA verification of the proposed site availability
Tab E.	Soil Reports
Tab F.	Archaeological and/or historical survey data
Tab.G.	Environmental Assessment
Tab H.	Correspondence (Utilities)
Tab I.	Flood Plain Clearance

VI. ENVIRONMENTAL ASSESSMENT

[Reference and summarize the results and conclusions of the environmental assessment. The environmental assessment is prepared by IHS in accordance with authorities and policies promulgated by IHS pursuant to DHHS General Administration Manual, Part 30 - Environmental Protection.* This is to be prepared by the Area in accordance with instructions included in the IHS, Division of Environmental Health, Environmental Review Manual. Questions 15 and 16 of Tab A-3, Environmental Review and Documentation, are not applicable to facilities construction and should be replaced with the following;

15. Is the building greater than 1115 square meters and greater than two ha of surface land area involved at a new site?

16. Is the project for other than buildings and greater than two ha of surface land involved?

*Actions associated with construction of 1115 square meters or less of occupiable space are excluded except when such construction impacts properties: (a) listed or eligible for listing on the National Register of Historic Places; (b) with possible archeological, prehistoric or scientific importance; and/or (c) located where natural asset review is mandated.]

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VII. CONCLUSIONS AND RECOMMENDATION

- A. [Present a list of conclusions reached as part of the technical evaluation and the environmental assessment. As a minimum, make a firm statement concerning the acceptability of the site. Additional conclusions such as need for special attention to utility services, archaeological clearances, building siting for floodplain or geological factors, etc., must be listed here.]

Specific approaches to identified problems must be recommended.

Make a statement to the affect that all mandatory Executive Orders, regulations, laws, etc. have been met and required clearances obtained.]

- B. [Include a statement recommending approval of the site along with any other recommendations related to actions to be taken to overcome problems. Also, include recommendations relative to any projects related to the proposed facility such as housing, recreation areas, etc.]